

Project Design Phase-II

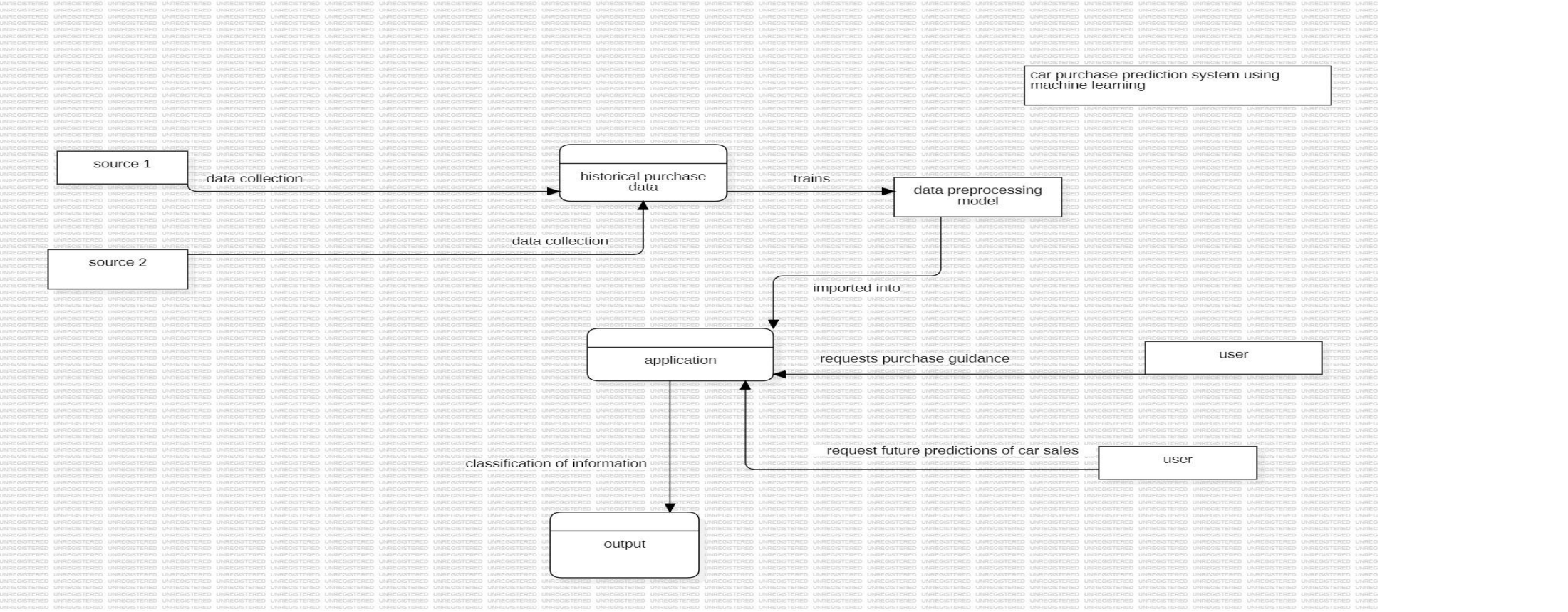
Data Flow Diagram & User Stories

Date	23 October 2023
Team ID	Team-592312
Project Name	Project – Car Purchase Prediction
Maximum Marks	10 Marks

Data Flow Diagrams:

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.

Car Purchase Prediction System DFD



User Stories

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
Car companies	Project setup & Infrastructure	USN-1	Set up the development environment with the required tools and frameworks to start the car purchase prediction project.	successfully configured with all necessary tools and frameworks	High	Sprint 1
Data Engineers	development environment	USN-2	Gather a diverse dataset of informations containing different types of data(model ,price ,mileage etc) for training the machine learning model.	Gathered a diverse dataset of information depicting various data on cars	High	Sprint 1
Data Engineers	Data collection	USN-3	Preprocess the collected dataset by encoding catagorical data,feature scaling values, and splitting it into training and validation sets.	preprocessed the dataset	High	Sprint 2
Researchers and Academics	data preprocessing	USN-4	Explore and evaluate different machine learning architectures (e.g., RandomForest, NaiveBayes, KNN etc) to select the most suitable model for car purchase prediction	we could explore various ML models	High	Sprint 2
Data scientist/Analysts	model development	USN-5	train the selected machine learning model using the preprocessed dataset and monitor its performance on the validation set.	we could do validation	High	Sprint 3
Data scientist/Analysts	Training	USN-6	implement regularization techniques and avoiding overfitting,underfitting to improve the model's robustness and accuracy.	we could do testing	medium	Sprint 3
Backend team	model deployment & Integration	USN-7	deploy the trained ml model to make it accessible for car purchase detection.	we could check the scalability	medium	Sprint 4
Backend team	Testing & quality assurance	USN-8	conduct thorough testing of the model toidentify and report any issues or bugs. fine-tune the model hyperparameters and optimize its performance based on user feedback and testing results.	we could test the quality by user reviews	medium	Sprint 5

